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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,295

05/30/2006

Akira Kitani

127993

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12/13/2007

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ALEXANDRIA, VA 22320-4850

EXAMINER

GREECE, JAMES R

ART UNIT

PAPER NUMBER

2873

MAIL DATE

DELIVERY MODE

12/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/579,295

Applicant(s)

KITANI ET AL.

Examiner

James R. Greece

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-24 is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/28/2006, 8/23/2006, 2/28/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Detailed Action

Applicant cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Status of the Application

Claims 1-24 are pending in this application

If the applicant is aware of any prior art or any other co-pending application not already of record, he/she is reminded of his/her duty under 37 CFR 1.56 to disclose the same.

Drawings

There are no objections to applicant's drawings at this time.

Information Disclosure Statement

The information disclosure statement filed in this case fails to comply with 37 CFR 1.56 (b) which states that information is material to patentability which is NOT CUMULATIVE to information... being made of record in the application. Applicant has cited over 30 references for consideration. The examiner believes that the significant number of references for consideration is largely cumulative and, therefore, based upon the large number of references cited, the initialed references have been considered in a cumulative manner.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Kitani et al (JP2003-344813).

In regard to claim 1, Kitani et al teaches the following as claimed:

A bi-aspherical type progressive-power lens with a progressive refractive power action dividedly allotted to a first refractive surface being an object side surface and a second refractive surface being an eyeball side surface, (See paragraph 0001) wherein when on the first refractive surface, a surface refractive power in a horizontal direction and a surface refractive power in a vertical direction, at a far vision diopter measurement position F1, are DHf and DVf respectively, and (See paragraph 0016) on the first refractive surface, a surface refractive power in a horizontal direction and a surface refractive power in a vertical direction, at a near vision diopter measurement position N1, are DHn and DVn respectively, relation of DHn and DVn are expressed by (See paragraph 0016)

$DHf + DHn < DVf + DVn$, and $DHn < DVn$ (See paragraph 0016)

surface astigmatism components at F1 and N1 of the first refractive surface are offset by the second refractive surface, and a combination of the first and second refractive surfaces gives a far vision diopter (Dr) and an addition diopter (ADD) based on prescription values, and (See paragraph 0016) a distribution of astigmatism on the first refractive surface is bilaterally symmetric with respect to one meridian passing through far vision diopter measurement position F1, a distribution of astigmatism on the second refractive surface is bilaterally asymmetrical with respect to one meridian passing through a far vision diopter measurement

position F2 of the second refractive surface, and a position of a near vision diopter measurement position N2 on the second refractive surface is shifted inward to a nose by a predetermined distance (See paragraph 0018 and 0061)

In regard to claim 2, Kitani et al teaches the following as claimed:
a distribution of transmission average diopter in a near portion of the bi-aspherical type progressive-power lens is arranged such that a nose side is dense and a temple side is sparse (See drawing 2)

In regard to claim 3, Kitani et al teaches the following as claimed:
A method of designing a bi-aspherical type progressive-power lens with a progressive refractive power action dividedly allotted to a first refractive surface being an object side surface and a second refractive surface being an eyeball side surface, (See paragraph 0001) wherein when on the first refractive surface, a surface refractive power in a horizontal direction and a surface refractive power in a vertical direction, at a far vision diopter measurement position F1, are DH_f and DV_f respectively, and (See paragraph 0016) on the first refractive surface, a surface refractive power in a horizontal direction and a surface refractive power in a vertical direction, at a near vision diopter measurement position N1, are DH_n and DV_n respectively, the relation of DH_n and DV_n is expressed by (See paragraph 0016)
 $DH_f + DH_n < DV_f + DV_n$, and $DH_n < DV_n$ (See paragraph 0016)
surface astigmatism components at F1 and N1 of the first refractive surface are offset by the second refractive surface, and a combination of the first and second refractive surfaces gives a far vision diopter (D_r) and an addition diopter (ADD) based on prescription values, and (See

paragraph 0016) a distribution of astigmatism on the first refractive surface is bilaterally symmetrical With respect to one meridian passing through the far vision diopter measurement position F1, a distribution of astigmatism on the second refractive surface is bilaterally asymmetrical with respect to one meridian passing through a far vision diopter measurement position F2 of the second refractive surface, and a position of a near vision diopter measurement position N2 on the second refractive surface is shifted inward to a nose by a predetermined distance (See paragraph 0018 and 0061)

In regard to claim 4, Kitani et al teaches the following as claimed:

A distribution of transmission average diopter in a near portion of the bi-aspherical type progressive-power lens is arranged such that a nose side is dense and a temple side is sparse (See drawing 2)

In regard to claim 5, Kitani et al teaches the following as claimed:
claimed:

A bi-aspherical type progressive-power lens with a progressive refractive power action dividedly allotted to a first refractive surface being an object side surface and a second refractive surface being an eyeball side surface, (See paragraph 0001) when on the first refractive surface, a surface refractive power in a horizontal direction and a surface refractive power in a vertical direction, at a far vision diopter measurement position F1, arc DHf and DVf respectively, and (See paragraph 0016) on the first refractive surface, a surface refractive power in a horizontal direction and a surface refractive power in a vertical direction, at a near vision diopter measurement position

NI, are DHn and DVn respectively, the relation of DHn and DVn is expressed by (See paragraph 0016)

$DH_f + DH_n < DV_f + DV_n$, and $DH_n < DV_n$ (See paragraph 0016)

surface astigmatism components at F1 and N1 of the first refractive surface are offset by the second refractive surface, and a combination of the first and second refractive surface gives a far vision diopter (Dr) and an addition diopter (ADD) based on prescription values, and (See paragraph 0016) a distribution of average diopter on the first refractive surface is bilaterally symmetrical with respect to one meridian passing through the far vision diopter measurement position F1, a distribution of average diopter on the second refractive surface is bilaterally asymmetrical with respect to one meridian passing through a far vision diopter measurement position F2 of the second refractive surface, and a position of a near vision diopter measurement position N2 on the second refractive surface is shifted inward to a nose by a predetermined distance. (See paragraph 0018 and 0061)

In regard to claim 6, Kitani et al teaches the following as claimed:

wherein a distribution of transmission average diopter in a near portion of the bi-aspherical type progressive-power lens is arranged such that a nose side is dense and a temple side is sparse. (See drawing 2)

In regard to claim 7, Kitani et al teaches the following as claimed:

a bi-aspherical type progressive-power lens with a progressive refractive power action dividedly allotted to a first refractive surface being an object side surface and a second refractive surface being an eyeball side surface, (See paragraph 0001)

wherein when on the first refractive surface, a surface refractive power in a horizontal direction and a surface refractive power in a vertical direction, at a far vision diopter measurement position F1, are DHf and DVf respectively, (See paragraph 0016) and on the first refractive surface, a surface refractive power in a horizontal direction and a surface refractive power in a vertical direction, at a near vision diopter measurement position N1, are DHn and DVn respectively, the relation of DHn and DVn is expressed by (See paragraph 0016)

$DHf + DHn < DVf + DVn$, and $DHn < DVn$, (See paragraph 0016)

surface astigmatism components at F1 and N1 of the first refractive surface are offset by the second refractive surface, and a combination of the first and second refractive surfaces gives a far vision diopter (Df) and an addition diopter (ADD) based on prescription values, (See paragraph 0016)

and a distribution of average diopter on the first refractive surface is bilaterally symmetrical with respect to one meridian passing through the far vision diopter measurement position F1, a distribution of average diopter on the second refractive surface is bilaterally asymmetrical with respect to one meridian passing through a far vision diopter measurement position F2 of the second refractive surface, and a position of a near vision diopter measurement position N2 on the second refractive surface is shifted inward to a nose by a predetermined distance. (See paragraph 0018 and 0061)

In regard to claim 8, Kitani et al teaches the following as claimed:

wherein a distribution of transmission average diopter in a near portion of the bi-aspherical type progressive-power lens is arranged such that a nose side is dense and a temple side is sparse.

(See drawing 2)

In regard to claim 9, Kitani et al teaches the following as claimed:

A bi-aspherical type progressive-power lens with a progressive refractive power action dividedly allotted to a first refractive surface being an object side surface and a second refractive surface being an eyeball side surface, (See paragraph 0001)

wherein when on the first refractive surface, a surface refractive power in a horizontal direction and a surface refractive power in a vertical direction, at a near vision diopter measurement position N1, are DH_n and DV_n respectively, the relation of DH_n and DV_n is expressed by (See paragraph 0016)

, $DV_n - DH_n > ADD/2$, (See paragraph 0016)

a surface astigmatism component at N1 of the first refractive surface is offset by the second refractive surface, and a combination of the first and second refractive surfaces gives a near vision diopter (D_n) based on prescription values. (See paragraph 0016)

In regard to claim 10, Kitani et al teaches the following as claimed:

wherein when on the first refractive surface, a surface refractive power in a horizontal direction and a surface refractive power in a vertical direction, at a far vision diopter measurement position F1, are DH_f and DV_f respectively, (See paragraph 0016) the relation of DH_f and DV_f is expressed by $DH_f + DH_n < DV_f + DV_n$, (See paragraph 0016) and $DV_n - DV_f > ADD/2$, and $DH_n -$

$DH_f < ADD/2$, surface astigmatism components at F1 and N1 of the first refractive surface are offset by the second refractive surface, and a combination of the first and second refractive surfaces gives a far vision diopter (D_f) and an addition diopter (ADD) based on prescription values. (See paragraph 0016)

In regard to claim 11, Kitani et al teaches the following as claimed:

wherein said first refractive surface is bilaterally symmetrical with respect to one meridian passing through the far vision diopter measurement position F1, said second refractive surface is bilaterally asymmetrical with respect to one meridian passing through a far vision diopter measurement position F2 of said second refractive surface, and a position of a near vision diopter measurement position N2 on said second refractive surface is shifted inward to a nose by a predetermined distance. (See paragraph 0018 and 0061)

In regard to claim 12, Kitani et al teaches the following as claimed:

wherein said first refractive surface is a rotation surface with one meridian passing through the far vision diopter measurement position F1 as a generating line, the second refractive surface is bilaterally asymmetrical with respect to one meridian passing through a far vision diopter measurement position F2 on the second refractive surface, and an arrangement of a near vision diopter measurement position N2 on the second refractive surface is shifted inward to a nose by a predetermined distance. (See drawing 2)

In regard to claim 13, Kitani et al teaches the following as claimed:

wherein on the first refractive surface, a sectional curve in the horizontal direction passing through the far vision diopter measurement position F1 is not a perfect circle but has a predetermined refractive power change, and a sectional curve of a cross section in the vertical direction including a normal line at an arbitrary position on the sectional curve in the horizontal direction is substantially the same as a meridian passing through the far vision diopter measurement position F1. (See drawing 2)

In regard to claim 14, Kitani et al teaches the following as claimed:

wherein in a structure of a combination of the first and second refractive surfaces giving the far vision diopter (D_f) and the addition diopter (ADD) based on the prescription values and providing as necessary a prism refractive power (P_f), an aspherical correction is performed to at least one or more items of occurrence of astigmatism and a diopter error and occurrence of distortion of an image in a peripheral visual field, due to the fact that the sight line in a wearing state and a lens surface can not intersect at right angles. (See drawing 2 and paragraphs 0026-0035)

In regard to claim 15, Kitani et al teaches the following as claimed:

a bi-aspherical type progressive-power lens with a progressive refractive power action dividedly allotted to a first refractive surface being an object side surface and a second refractive surface being an eyeball side surface, (See paragraph 0001)

wherein when on the first refractive surface, a surface refractive power in a horizontal direction and a surface refractive power in a vertical direction, at a near vision diopter measurement

position N1, are DH_n and DV_n respectively, (See paragraph 0016) the relation of DH_n and DV_n is expressed by $DV_n - DH_n > ADD/2$, (See paragraph 0016) and a surface astigmatism component at N1 of the first refractive surface is offset by the second refractive surface, and a combination of the first and second refractive surfaces gives a near vision diopter (D_n) based on prescription values. (See paragraph 0016)

In regard to claim 16, Kitani et al teaches the following as claimed:

wherein when on the first refractive surface, a surface refractive power in a horizontal direction and a surface refractive power in a vertical direction, at a far vision diopter measurement position F1, are DH_f and DV_f respectively, the relation of DH_f and DV_f is expressed by $DH_f + DH_n < DV_f + DV_n$, and $DV_n - DV_f > ADD/2$, and $DH_n - DH_f < ADD/2$, surface astigmatism components at F1 and N1 of the first refractive surface are offset by the second refractive surface, and a combination of the first and second refractive surfaces gives a far vision diopter (D_f) and an addition diopter (ADD) based on prescription values. (See paragraph 0016)

In regard to claim 17, Kitani et al teaches the following as claimed:

wherein said first refractive surface is bilaterally symmetrical with respect to one meridian passing through the far vision diopter measurement position F1, the second refractive surface is bilaterally asymmetrical with respect to one meridian passing through a far vision diopter measurement position F2 of the second refractive surface, and a position of a near vision diopter measurement position N2 on the second refractive surface is shifted inward to a nose by a predetermined distance.

(See paragraph 0018 and 0061)

In regard to claim 18, Kitani et al teaches the following as claimed:

wherein said first refractive surface is a rotation surface with one meridian passing through the far vision diopter measurement position F1 as a generating line, the second refractive surface is bilaterally asymmetrical with respect to one meridian passing through a far vision diopter measurement position F2 on the second refractive surface, and a position of a near vision diopter measurement position N2 on the second refractive surface is shifted inward to a nose by a predetermined distance. (See drawing 2)

In regard to claim 19, Kitani et al teaches the following as claimed:

wherein on the first refractive surface, a sectional curve in the horizontal direction passing through the far vision diopter measurement position F1 is not a perfect circle but has a predetermined refractive power change, and a sectional curve of a cross section in the vertical direction including a normal line at an arbitrary position on the sectional curve in the horizontal direction is substantially the same as a meridian passing through the far vision diopter measurement position F1. (See drawing 2)

In regard to claim 20, Kitani et al teaches the following as claimed:

wherein in a structure of a combination of the first and second refractive surfaces giving the far vision diopter (D_f) and the addition diopter (ADD) based on the prescription values and providing as necessary a prism refractive power (P_f), an aspherical correction is performed to at least one or more items of occurrence of astigmatism and a diopter error and occurrence of

distortion of an image in a peripheral visual field, due to the fact that a sight line and a lens surface in a wearing state intersect at right angles. (See drawing 2 and paragraphs 0026-0035)

Allowable Subject Matter

3. Claims 21-24 are allowed.
4. The following is a statement of reasons for the indication of allowable subject matter:
The prior art taken singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claims, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper.

Specifically in regard to independent claims 21-24, every limitation as disclosed in the respective claims are necessary in order to make the claims individually allowable. The combination of structural limitations combined with the numerical constraints set upon the design of the lens and method of designing the lens is unique in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Greece whose telephone number is 571-272-3711. The examiner can normally be reached on M-Th 7:30-6.

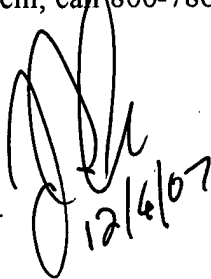
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/579,295
Art Unit: 2873

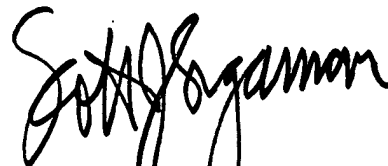
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James R. Greece
Patent Examiner
571-272-3711



12/4/07



Scott J. Sugarman
Primary Examiner